APPENDIX B

SUPPLEMENTAL INSPECTION PROGRAM

A. OBJECTIVES AND PHILOSOPHY OF THE SUPPLEMENTAL INSPECTION PROGRAM

The supplemental inspection program is designed to support the NRC's goals of maintaining safety, enhancing public confidence, improving the effectiveness, efficiency and realism of the regulatory process, and reducing unnecessary regulatory burden. While the baseline inspection program and performance indicators should provide sufficient information to allow the NRC to meet the goal of assuring licensee's are maintaining safety at facilities with an absence of risk significant performance issues, additional supplemental inspections are required[1] to provide enhanced information regarding safety at facilities where risk significant performance issues have been identified. These performance issues may be identified either by inspection findings evaluated using the significance determination process (SDP) or when performance indicator thresholds are exceeded.

The breadth and depth of the supplemental inspections increase in proportion to the relative risk significance of the identified performance issues and will be based upon the guidance provided in the NRC's assessment "Action Matrix" and the Supplemental Inspection Selection Table.

B. APPLICABILITY

The supplemental inspections contained in this Appendix apply to all strategic performance areas and associated cornerstones of safety. The inspection report written for the supplemental inspections should contain the NRC's assessment for each inspection requirement. These inspection requirements are independent of whether the performance issues were the result of performance indicators or inspection findings. The resource estimates provided in each supplemental inspection procedure are estimates only, and may vary considerably due to the complexity of the issue(s) and the thoroughness of the licensee's own evaluations and proposed corrective actions.

[1] Note that the assessment process allows the option of not performing a supplemental inspection for a white issue identified as part of a licensee self assessment activity. This is not considered a deviation from the action matrix.

SUPPLEMENTAL INSPECTION SELECTION TABLE

	One or two white inputs (in different cornerstones) in a strategic performance area	**One degraded cornerstone (two white inputs or one yellow input) or any three white inputs in a strategic performance area**	**Repetitive degraded cornerstone, multiple degraded cornerstones, multiple yellow inputs, or any one red input**
Supplemental Inspection Procedure and Scope	Inspection Procedure 95001 consisting of review of the licensee's evaluation of root cause and extent of condition; plus review of proposed corrective actions. Follow-up NRC inspection to determine effectiveness of corrective actions. Inspection limited to specific issue(s) or performance area of concern.	Inspection Procedure 95002 consisting of review of the licensee's evaluation of root cause and extent of condition, plus review of proposed corrective actions for both individual and collective issues. Independent NRC inspection to assess validity of licensee's extent of condition. Follow-up NRC inspection to evaluate adequacy of licensee corrective actions.	Inspection Procedure 95003 consisting of a large multi-disciplined NRC team inspection(s). Inspection focused on all key attributes associated with effected strategic performance areas.

Assessment of Supplemental Inspection Findings	Significant weaknesses in the licensee's evaluation may result in expansion of the inspection to independently acquire the information necessary to satisfy the inspection requirements. The original issue may also not be removed from the action matrix until the weaknesses in the evaluation are addressed.	Significant weaknesses in licensee evaluation may result in expansion of the inspection to independently acquire the information necessary to satisfy the inspection requirements. The original issue may also not be removed from the action matrix until the weaknesses in the evaluation are addressed.	Results of this supplemental inspection will be assessed to determine if additional agency actions are warranted and whether the facility should be ordered to shut down and be placed under Inspection Manual Chapter 0350.

C. DESCRIPTION OF SUPPLEMENTAL INSPECTION PROGRAM

The supplemental inspection program contains three procedures which become deeper and broader as the safety significance of the performance issues increases. For one or two white inputs in a strategic performance area (different cornerstones), supplemental inspection is limited to a thorough oversight of the licensee's evaluation.

For one degraded cornerstone or any three white inputs in a strategic performance area, the supplemental inspection will also review the licensee's collective evaluation for multiple issues. In addition, the portions of the licensee's evaluation concerning extent of condition will be assessed independently by the NRC. This independent assessment will be conducted using inspection procedures selected from tables that list the procedures by cornerstone and key attribute provided in Attachment 1 to this Appendix. The objective of this inspection will be to ensure that the licensee has properly identified the scope (extent) of the issues and that the proposed corrective actions are sufficiently comprehensive. The inspection procedures listed in the Attachment 1 tables include: baseline inspection procedures (portions of which can be repeated with additional samples); procedures that were part of the core, regional initiative, and temporary instruction portions of the old inspection program; and new inspection procedures written solely for the purpose of performing supplemental inspection. A combination of procedures or portions of procedures can also be used as appropriate. Inspection hours utilized in fulfilling this inspection requirement should be charged to inspection procedure 95002, regardless of the specific procedure(s) chosen for implementation.

D. ASSESSING INSPECTION FINDINGS

If during implementation of Inspection Procedures 95001 or 95002, significant weaknesses are identified in the licensee's evaluation of the performance issue, the inspection may be expanded as necessary to independently acquire the information necessary to satisfy the inspection requirements. Also, the original performance issue will remain open and will not be removed from the action matrix until the weaknesses in the evaluation are addressed and corrected. Programmatic weaknesses associated with the licensee's evaluation of the performance issue will also be documented in the inspection report and additional focus will be given to those areas during the next annual problem identification and resolution baseline inspection.

Should new or additional examples of performance issues (non-programmatic) be identified during supplemental inspections, the new issues will be categorized using the SDP, and if indicated, the corresponding supplemental inspection procedure will be performed. Supplemental inspections will also be performed if additional examples of performance issues are reported via PIs that result in crossing a new PI threshold. Additional supplemental inspections will generally not be performed if the new or additional examples of performance issues reported via PIs do not result in crossing a new PI threshold.

Significant weaknesses identified during performance of Inspection Procedure 95003 will be assessed to determine if additional agency actions are warranted and whether the facility should be ordered to be shut down. In such cases, the facility will be placed under Inspection Manual Chapter 0350.

END

ATTACHMENT 1

INSPECTION PROCEDURES TO BE USED FOR ASSESSING EXTENT OF CONDITION

INITIATING EVENTS

Protection Against External Events	Human Performance	Procedure Quality	Equipment Performance	Design	Configuration Control
71111.01 71111.05 71111.06	71841 71111.14 71707 41500 71715	42700 72701	71111.08 71111.07 71111.12 71111.13 62700 62706 93805 50002 55050 55100 62709	93803 93807 93811 50002 52001 52002	71111.04 71111.13 71111.20 71707 62709
General Procedures 90712 92700 93801 93802 93806 93808					

MITIGATING SYSTEMS

Design	Protection Against External Events	Configuration Control	Equipment Performance	Procedure Quality	Human Performance
71111.02 71111.17 71111.23 93803 93807 71111.21 93811 52001 52002 93810 62710	71111.01 71111.05 71111.06	71111.04 71111.13 71111.16 71111.20 71707 62709	62700 62706 71111.07 73756 71111.12 71111.13 71111.15 71111.19 71111.21 71111.22 71111.23 71111.17 93805 38703 49001 55050 55100 57050 57060 57070 57080 57090 62002 62708 70370 93810 93811 62709 62710	42700 72701 42001 73052	71841 71111.11 71111.14 71111.16 71707 41500 71715
General Procedures 90712 93803 93802 93804 92700 93801 93806 93808					

BARRIER INTEGRITY

Fuel Cladding Performance	RCS Equip. & Barrier Perf.	Containment SSC & Barrier Perf.	Human Performance	Procedure Quality	Design Control	Configuration Control
61702 61705 61706 61707 61708 61709 61710	62700 62706 71111.08 71111.12 71111.13 71111.17 71111.22 71111.23 61728 73753 73051 73755 93805 55050 55100 57050 57060 57070 57080 57090 73756 62709	61720 62700 62706 71111.12 71111.13 71111.22 71111.17 71111.23 61715 70313 70323 93805 50002 38703 49001 55050 55100 57050 57060 57070 57080 57090 62002 62003 70370 62709	71841 71111.11 71111.14 71707 41500 71715	42700 70307 72701 73052	71111.02 71111.17 71111.23 93803 93811 50002	71111.04 71111.13 71111.20 71707 62709
General Procedures 90712 92700 93801 93808						

EMERGENCY PREPAREDNESS

ERO Readiness	Facilities and Equipment	Procedure Quality	ERO Performance	Offsite EP
82001 71114	82001 71114	82001 71114	82001	No NRC inspection of this key attribute. - Evaluation performed by FEMA

PUBLIC RADIATION SAFETY

Facilities/Equipment	Program/Process	Human Performance
83502 83502.01 83502.02	83502 83502.01 83502.02 83502.03 86730	83502 83502.01 83502.02 83502.03 71841 41500

OCCUPATIONAL RADIATION SAFETY

Facilities and Equipment	Program/Process	Human Performance
83725 83724	83725 83724 79702 83728	83723 71841 41500
General Procedures 83501		

PHYSICAL PROTECTION

Physical Protection System	Access Authorization System	Access Control System	Response to Contingency Events
81018 81020 81034 81038 81042 81046 81052 81058 81062 81064 81066 81078 81084 81810	81018 81020 81034 81038 81502 81700	81018 81020 81034 81038 81042 81046 81054 81058 81064 81070 81072 81074 81080	81018 81020 81022 81034 81038 81042 81052 81054 81058 81062 81064 81066 81078 81080 81084 81088 81110 81501 81601 81700

END

ATTACHMENT 2

PROCEDURES LISTED IN ATTACHMENT 1

Inspection Procedure No.	Inspection Procedure Title
38703	Commercial Grade Procurement Inspection
41500	Training and Qualification Effectiveness
42001	Emergency Operating Procedures
42700	Plant Procedures
49001	Inspection of Erosion/Corrosion Monitoring Programs
50002	Steam Generators
52001	Digital Retrofits Receiving Prior Approval
52002	Digital Retrofits Not Receiving Prior Approval
55050	Nuclear Welding General Inspection Procedure
55100	Structural Welding General Inspection Procedure
57050	Nondestructive Examination Procedure Visual Examination Procedure Review/Work Observation/ Record Review
57060	Nondestructive Examination Procedure Liquid Penetrant Examination Procedure Review/Work Observation/Record Review
57070	Nondestructive Examination Procedure Magnetic Particle Examination Procedure Review/Work Observation/Record Review
57080	Nondestructive Examination Procedure Ultrasonic Examination Procedure Review/Work Observation Record Review

Inspection Procedure No.	Inspection Procedure Title
57090	Nondestructive Examination Procedure Radiographic Examination Procedure Review/Work Observation/ Record Review
61702	Surveillance of Core Power Distribution Limits
61705	Calibration of Nuclear Instrumentation Systems
61706	Core Thermal Power Evaluation
61707	Determination of Reactor Shutdown Margin
61708	Isothermal and Moderator Temperature Coefficient Determinations
61709	Total Power Coefficient of Reactivity at Pressurized Water Reactors
61710	Control Rod Worth Measurement
61715	Verification of Containment Integrity
61720	Containment Local Leak Rate Testing
61728	Independent Measurement of RCS Leak Rates for a PWR
62002	Inspection of Structures, Passive Components, and Civil Engineering Features at Nuclear Power Plants
62003	Inspection of Steel and Concrete Containment Structures at Nuclear Power Plants
62700	Maintenance Program Implementation
62706	Maintenance Rule Inspection Procedure
62708	Motor-Operated Valve Capability
62709	Configuration Risk Assessment and Risk Management Process
62710	Power-Operated Gate Valve Pressure Locking and Thermal Binding
70307	Containment Integrated Leak Rate Test - Procedure Review
70313	Containment Integrated Leak Rate Test

Inspection Procedure No.	Inspection Procedure Title
70323	Containment Leak Rate Test Results Evaluation
70370	Testing Piping Support and Restraint Systems
71707	Plant Operations
71715	Sustained Control Room and Plant Observation
71841	Supplemental Inspection for Human Performance
72701	Modification Testing
73051	Inservice Inspection - Review of Program
73052	Inservice Inspection - Review of Procedures
73753	Inservice Inspection
73755	Inservice Inspection - Data Review and Evaluation
73756	Inservice Testing of Pumps and Valves
79702	Control and Monitoring of Radiological Source Term
81018	Security Plan and Implementing Procedures
81020	Management Effectiveness - Security Program
81022	Security Organization
81034	Security Program Audit
81038	Records and Reports
81042	Testing and Maintenance
81046	Locks, Keys, and Combinations
81052	Physical Barriers-Protected Areas
81054	Physical Barriers-Vital Areas, Material Access Areas and Controlled Access Areas
81058	Security System Power Supply

Inspection Procedure No.	Inspection Procedure Title
81062	Lighting
81064	Compensatory Measures
81066	Assessment Aids
81070	Access Control - Personnel
81072	Access Control (Power Reactor) - Packages
81074	Access Control - Vehicles
81078	Detection Aids - Protected Areas
81080	Detection Aids - VA, MAA, CAA
81084	Alarm Stations
81088	Communications
81110	Operational Safeguards Response Evaluation (OSRE)
81501	Personnel Training and Qualifications - General Requirements
81502	Fitness for Duty Program
81601	Safeguards Contingency Plan Implementation Review
81810	Protection of Safeguards Information
82001	Evaluation of Emergency Preparedness
83501	Significant Uncontrolled Exposures
83502	Evaluation of Public Radiation Safety
83502.01	Radioactive Gaseous and Liquid Trreatment and Monitoring Systems
83502.02	Radioactive Material Process and Transportation
83502.03	Radiological Environmental Monitoring Program and Radioactive Material Control Program

Inspection Procedure No.	Inspection Procedure Title
83723	Training and Qualifications: General Employee Training, Radiation Safety, Plant Chemistry, Radwaste, and Transportation
83724	External Occupational Exposure Control and Personal Dosimetry
83725	Internal Exposure Control and Assessment
83728	Maintaining Occupational Exposures ALARA
86730	Transportation of Radioactive Materials (49CFR Parts 100-179 & 10 CFR Part 71)
90712	In-Office Review of Written Reports of Nonroutine Events at Power Reactor Facilities
92700	Onsite Follow-up of Written Reports of Nonroutine Events at Power Reactor Facilities
93801	Safety System Functional Inspection (SSFI)
93802	Operational Safety Team Inspection (OSTI)
93803	Safety Systems Outage Modifications Inspection
93804	Risk-Based Operational Safety and Performance Inspection
93805	Maintenance Program
93806	Operational Readiness Assessment Team Inspections
93807	Systems Based Instrumentation and Control Inspection
93810	Service Water System Operational Performance Inspection (SWSOPI)
93811	Electrical Distribution System Functional Inspection (EDSFI)

END